December 6, 2001 is respectfully requested in view of the above amendment and following remarks.

No claims have been cancelled or added. Claims 1-20 are pending in this application. The specification and claims 1, 6, 9, 15-16 and 19 have been amended. Claim 15, as amended, generally incorporates features from its parent claim that were previously explicitly recited. The amendments do not add new matter. The specification and claims have been amended to more clearly define Applicants' claimed invention

#### The Restriction of claims 1-20.

Examination of the pending application was restricted to:

invention I claims 1-14 and 16-20, drawn to a porous web material and the process of making the porous web material, classified in class 442, subclass 389;

or,

invention II claim 15, drawn to an infusion container, classified in class 426, subclass 84.

Applicants have amended claim 15 to depend directly from claim 1. As such, claim 15 is now properly a part of invention I.

Additionally, MPEP section 803 states (underlining added) "If the search and examination of an entire application can be made without <u>serious burden</u>, the examiner <u>must</u> examine it on the merits, even though it includes claims to distinct or independent inventions." The Examiner has not shown or even asserted it would be a "serious burden" to perform a complete search and examination of only 1 extra claim (claim 15). Since the Examiner has not made any showing of undue burden, the above requirement for restriction is respectfully traversed and the Examiner is respectfully urged to withdraw the same and examine all of claims 1-20 as mandated by the MPEP.

In order to strictly comply with the Examiner's requirement in the above restriction requirement, and without agreeing to the propriety of the restriction requirement, Applicants' elect, with traverse, the invention of Group I.

#### The §102(e) rejection of claims 1-3 and 5-17 over Gbur et al.

Claims 1-4, 6, 9-11 and 16-19 were rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent No. 6,139,883 to Gbur et al ('883).

• The literal language of the '883 claims requires distinct layers in the claimed web material.

35 U.S.C. §112, second paragraph states: "[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." Claim 1 of the '883 patent recites:

1. A fibrous, porous web material of non-heat seal tissue having a basis weight of 9 to 18 g m<sup>-2</sup> and comprising a first layer comprising vegetable fibers and a second layer comprising hardwood fibers juxtaposed thereto wherein the second layer has a smaller pore size than the first layer.

The distinctly claiming requirement of 35 U.S.C. §112, second paragraph means that the claims must have a clear and definite meaning when construed in light of the complete patent document. Miles Laboratories Inc. v. Shandon Inc., 997 F.2d 870, 874-875; 27 USPQ2d 1123, 1126 (Fed. Cir. 1993).

Claim 1 of the '883 patent recites that the claimed fibrous, porous web material comprises "a first layer . . . and a second layer". The language of claim 1 explicitly requires the existence of a first layer and the second layer in the formed fibrous, porous web material. The presence of two distinct layers within the produced fibrous,

porous web material is further supported in claim 1 by the recitation therein that the second layer must be "juxtaposed" to the first layer. As defined in Webster's Third New International Dictionary Of The English Language, unabridged (1986) defines juxtaposed as "placed side by side: being in juxtaposition." Webster's defines juxtaposition as: "the act or an instance of placing two or more objects in close spatial or ideal relationship . . . also: the condition of being so placed". Clearly, without distinct first and second layers in the produced fibrous, porous web material, it would not be possible for the second layer to be juxtaposed to the first layer. This is still further supported by the claim 1 recitation that "the second layer has a smaller pore size than the first layer". Again and clearly, without distinct first and second layers in the produced fibrous, porous web material, it would not be possible for the second layer to have a smaller pore size than the first layer. See also '883 claims 6, 7, 8, 11, 16, 17, 18, 20, 21, 22, 24, 25, 26, 32 and 33, each of which explicitly includes limitations to a layer or layers.

# • The '883 specification teaches distinct layers in the claimed web material.

The requirement for two distinct layers is even further supported, repeatedly and extensively, within the '883 reference. See, for example, column 2, lines 17-22: "[a]ccording to the first aspect of the present invention there is provided a fibrous, porous web material . . . comprising a first layer and a second layer juxtaposed thereto wherein the second layer has a smaller pore size then the first layer."; column 2, lines 28-29: "[i]n the web material of the first aspect of the invention, the second layer has a smaller pore size than the first layer."; column 2, lines 63-66: ". . . the second layer is produced from fibres (e.g. hardwood fibres) which are shorter and finer than the fibres (e.g. vegetable fibres) of the first layer."; column 3, lines 51-52: "[i]t should be appreciated that the invention also covers papers comprising three or more layers."; column 3, line 66 to column 4, line 7, with bolding added: "[i]f the material comprises only two layers . . . then the pattern is formed in the second layer of the material, . . . This is an important feature since the shorter fibres (of the second layer) provide good pattern definition because of their lower cohesiveness and greater ease of

movement than the longer fibres of the first layer . . .": column 4, lines 36-40: "[a]s shown in the drawing, the stock for forming the first layer 1 is laid onto a continuously moving paper forming fabric 2 from a head box 3. Water is withdrawn as shown by the arrows 4 and the second layer 5 is subsequently laid down from a further head box 6."; and column 4, lines 47-49, with bolding added: "[t]he liquid jet pressure is preferably 3-4 bars which causes perforations to be formed in the layer 2. There is no substantial perforation of layer 1."

# The prosecution history of the '883 patent application requires distinct layers in the claimed web material.

The requirement for two distinct layers is still further supported, repeatedly and extensively, during prosecution of the '883 patent application. An AMENDMENT submitted during prosecution of the '883 patent application by Thomas Q. Henry acting as counsel for Gbur et al and mailed on July 26, 1999 (enclosed herewith as appendix 1) at page 3, lines 11-15 states, with underlining added: "[t]he claims have been rejected as unpatentable over the prior art. Claim 1 has been amended to include the limitations of claims 7 and 15, which have accordingly been cancelled. Claim 1 and its dependent claims therefore are limited to materials which have a first layer of vegetable fibers and a second layer of hardwood fibers. It is submitted that materials of this type are not disclosed or made obvious from the cited art, . . . " In the above AMENDMENT at page 3, lines 16-19, discussing United States Patent No. 5,288,402 to Yoshida, counsel for Gbur et al admits: "[t]he Yoshida patent (United States Patent 5,288,402) discloses a two-layer filter medium . . ." In exhibit 1, page 3, lines 19-24 counsel for Gbur et al goes on to admit, underlining and bracketed text added: "[t]he Office Action indicates that original claim 1 of the present application differed from Yoshida only in specifying a lower basis weight. However, the Office Action further suggests that specifying fibre types in claim 1 in the present application results in patentable subject matter. Thus, where the layers of the Yoshida filter is comprised of synthetic organic polymers, claim 1 has been amended to require [layers comprised of] hard wood and vegetable fibers."

Further, the consistent usage of the term "layer" by Gbur et al defines that term. Bell Atlantic Network Services Inc. v. Covad Communications Group Inc., 262 F.3d 1258, 1271; 59 USPQ2d 1865, 1872 (Fed. Cir. 2001).

In sum, the language of the '883 claims, the '883 specification and the '883 application prosecution history all explicitly require the presence of distinct layers in the Gbur fibrous, porous web material. Without contention, the '883 disclosure is properly limited to a fibrous, porous web material of specified composition having at least two distinct layers. There is NO disclosure in the '883 reference of an inventive single layer fibrous, porous web material or of a multi-phase, single layer web material.

- Pending claims 1-4, 9-11 and 16-19 are not anticipated by the '883 reference.
  Pending claim 1, as amended, recites:
  - 1. A single layer fibrous non-woven non-heat seal porous web material comprising 0.5 to 25 percent by weight of synthetic material with natural fibers comprising the remainder of said web material.

"It is axiomatic that for prior art to anticipate under §102 it has to meet every element of the claimed invention." Stoller v. Ford Motor Co., 18 USPQ2d 1545, 1547 (Fed. Cir. 1991).

The '883 reference fails to teach a single layer fibrous, porous web material as recited in Applicants' pending claims. Claims 1-4, 9-11 and 16-19 are not anticipated by the '883 reference and are patentable for at least this reason.

 Pending claim 9 is not anticipated by the '883 reference for additional reasons.

Pending claim 9, as amended, recites: "The web material of claim 1 comprising a first phase and a second phase."

Atty. Docket No.: DEXNON/096/US

As discussed in Applicants' specification at page 8, lines 8-9, Applicants' invention also contemplates multi-phase web materials. As described in Applicants' specification at page 8, line 26 to page 9, line 5:

Typically, webs produced in this manner have the first phase covering the entire area of the web surface in contact with the inclined wire screen while the opposing side of the web has a mixture of fibers with the top phase fibers greatly predominating. In this way there is not a clear line of demarcation between the two phases of the multi-phase sheet materials; yet there is a predominance of top phase fibrous material on the top surface or top phase of the multi-phase sheet. The center or interface boundary, of course, is composed of a mixture of the two different types of fibers.

Thus, a two phase web material of the present invention is a single layer material which may have a gradation of fibers through its cross section. There is no distinct interface between the phases of this invention and therefore the web material of the present invention can not have distinct layers.

The '883 reference fails to teach a single layer, multi-phase fibrous, porous web material as recited in Applicants' pending claims. Claims 9 and 10 are not anticipated by the '883 reference and are patentable for at least this additional reason.

## Pending claim 6 is not anticipated by the '883 reference.

Pending claim 6, as amended, recites in one pertinent part: "[a] . . . web material consisting of 0.5 to 25 percent by weight of synthetic pulp having a microfibrillar structure with natural fibers comprising the remainder of said web material.

To be prior art under 35 U.S.C. §102 a reference must contain an enabling disclosure of the invention. Chester v. Miller, 15 USPQ2d 1333, 1336 note 2 (Fed. Cir. 1990). The '883 reference does not define of what materials the "manmade fibres" therein are comprised and is devoid of any teaching that the "manmade fibres"

are a synthetic pulp or that the "manmade fibers" have a micro-fibrillar structure. The '883 reference does not enable a fibrous, porous web material comprising synthetic pulp or fibers having a micro-fibrillar structure. Claim 6 is not anticipated by the '883 reference and is patentable for at least this additional reason.

#### The §103(a) rejection of claims 1-3 and 5-17 over Gbur et al.

Claims 1, 5, 7-8, 12-14 and 20 were rejected under 35 U.S.C. §103(a) as being anticipated by United States Patent No. 6,139,883 to Gbur et al ('883) in view of United States Patent No. 5,601,716 to Heinrich et al ('716).

MPEP §2143, relying on relevant legal precedent, mandates:

To establish a *prima facie* case of obviousness three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

- There is no suggestion or motivation to combine the cited references.
  - There is no suggestion or motivation within the references or the art to make the combination proposed in the Office Action.

A prima facie case of obviousness requires that there be some suggestion or motivation to combine the cited references and further that the suggestion or motivation either be in the references or in knowledge generally available to one of ordinary skill in the art.

The '883 reference is directed to a multi-layer fibrous, porous web material of the <u>non-heat seal type</u>. See column 1, lines 5-6 therein. The '716 reference is directed to a multi-layer fibrous, porous web material of the <u>heat seal type</u>. See column 2, lines 61-65 therein.

The '883 reference teaches only the deposition of a first solution onto a forming fabric to form a first layer and the deposition of a second solution onto the first layer to form a second layer. See column 4, lines 29-41 and Figure 1 therein. The '716 reference teaches the deposition of an aqueous solution on a forming fabric to form a first layer and the deposition of molten plastic filaments onto the formed and dried first layer to form a second layer. See column 1, lines 57-67 therein.

The '883 material was classified by the United States Patent and Trademark Office in Class 426, Subclass 77. The '716 material was classified by the United States Patent and Trademark Office in Class 210, Subclass 490.

In sum, the '883 and the '716 references are each directed to completely different multi-layer fibrous, porous web materials; manufactured by completely different methods; placed by the United States Patent and Trademark Office in completely different categories; and with the respective materials having completely different properties. A person of ordinary skill in the art would have no suggestion or motivation to combine either of the cited references with the other.

 There is no suggestion or motivation to make the combination asserted in the Office Action as this proposed modification renders the '716 invention unsatisfactory for its intended purpose.

MPEP §2143.01 states: "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification."

The pending claims are directed to a non-heat seal porous web material. See claims 1-20 therein. The '883 reference is directed to a multi-layer non-heat seal porous web material. See column 1, lines 5-8 and claims 1-33 therein. The '716 reference is directed to multi-layer heat seal porous web material. See column 2, line 61 to column 3, line 6; column 4, lines 7-10 and claims 13-14 therein.

Use of the polypropylene or polyethylene fibers of the '716 reference in the furnishes of the '883 reference would result in some type of a web material that is incapable of being heat sealed. The modification proposed in the Office Action renders

the '716 web material unsatisfactory for use as a heat sealable web material. Under MPEP §2143.01 there can be no suggestion to make the modification proposed in the Office Action.

 The reasoning asserted to combine the '883 and '716 references is contradicted by the cited text, is faulty and is legally insufficient to support a *prima facie* case of obviousness.

MPEP §2142 states that either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious.

The Office Action states: "it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the synthetic materials, like polypropylene fibers or polyethylene fibers, of Heinrich for the man-made fibers of Gbur, motivated with expectation that these synthetic materials would function equivalently to enhance the properties of diffusion of the web material as noted in Heinrich, (column 2, lines 63-64)."

Column 3, lines 56-64 of Heinrich ('716) reference, discussing multi-layer web materials such as those taught by the '883 reference, states, with underlining added:

On the other hand, conventional filter materials as shown in FIG. 2 includes pores 7 substantially in the form of straight ducts which pass through both the upper synthetic fiber layer 3, and the lower natural fiber layer 4. Accordingly, pore 7 provides direct communication between the upper side of layer 3 and the lower side of layer 4, thereby allowing particles such as tea or coffee particles, to diffuse through the filtered material. This is undesirable.

The '716 reference at column 3, lines 63-64 specifically teaches that multi-layer fibrous porous materials such as taught by the '883 reference are "undesirable".

Thus, in actuality the cited text of Heinrich is contrary to the Office Action assertion. Applicants respectfully transverse the above assertion and respectfully assert that it should be supported or withdrawn.

Claims 1, 5, 7-8, 12-14 and 20 are not *prima facie* obvious over the '883 and '716 references, either singularly or in combination, and are therefor patentable for at least these reasons.

## The '716 reference teaches away from the '883 reference.

"One important indicium of nonobviousness is 'teaching away' from the claimed invention by the prior art." In re Braat, 16 USPQ2d 1813, 1814 (Fed. Cir. 1990).

As discussed above, the '883 reference is directed to a <u>non-heat seal</u> material while the '716 reference is directed to a <u>heat seal</u> material.

As discussed above, the '883 reference forms layers from fluid solutions. The '716 reference forms the synthetic layer by extrusion of molten plastic fibers.

As discussed above, the '716 reference teaches that multi-layer fibrous porous materials such as taught by the '883 reference are "undesirable".

Clearly, the '716 reference teaches away from combination with the '883 reference, indicating the nonobviousness of the pending claims. Claims 1, 5, 7-8, 12-14 and 20 are not *prima facie* obvious over the '883 and '716 references, either singularly or in combination, and are therefor patentable for at least this reason.

# • There is no expectation of success in combining the references.

A prima facie case of obviousness requires that there must be a reasonable expectation of success in achieving the claimed invention from the cited references. Applicants' invention includes a wet laid, single layer fibrous, porous web material which may further include more than one phase. The '883 reference discloses only a multi-layer fibrous, porous web material. The '716 reference discloses only a multi-layer fibrous, porous web material wherein one layer is produced by melt blowing.

Thus, there is no reasonable expectation of success in providing a single layer, fibrous porous web material from the multi-layer disclosures of the '883 and '716 references.

Additionally, the paragraph of the '716 reference cited in the Office Action (column 3, lines 63-64) specifically teaches that wet laid multi-layer fibrous, porous web materials are "undesirable" for use as infusion materials. Thus, the '716 reference strongly teaches against combination with '883 reference. Claims 1, 5, 7-8, 12-14 and 20 are not *prima facie* obvious over the '883 and '716 references, either singularly or in combination, and are therefor patentable for at least this reason.

 Even if the references are combined, the combination does NOT teach or suggest all of the limitations of the pending claims.

As discussed above, Applicants' claims are drawn to a single layer fibrous, porous web material. Applicants' single layer fibrous porous web material may have two or more phases therein.

As discussed above, the '883 reference teaches a multi-layer fibrous, porous web material. There is no teaching or suggestion in the '883 patent of a single layer fibrous, porous web material. The '716 reference at column 1, lines 8-9 states: "[t]he invention is directed to a filter material including an at least two layer non-woven substrate material . . ." The '716 reference teaches a multi-layer fibrous, porous web material and specifically excludes single layer nonwoven materials.

Even if the '883 and '716 references are improperly combined, there is still no teaching or suggestion in the combination of a single layer fibrous, porous web material as recited in Applicants' pending claims 1, 5, 7-8, 12-14 and 20. Claims 1, 5, 7-8, 12-14 and 20 are not *prima facie* obvious over the '883 and '716 references, either singularly or in combination, and are therefor patentable for at least this reason.

Pending claim 5 is not obvious in view of the '883 and '716 references,
 either singly or in combination for additional reasons.

Pending claim 5 recites in one pertinent part: "wherein the synthetic material is not fully thermally activated."

A non-enabling reference may qualify as prior art for the purpose of determining obviousness under 35 U.S.C. §103, but only for what is disclosed in that reference. Symbol Technologies Inc. v. Opticon Inc., 19 USPQ2d 1241, 1247 (Fed. Cir. 1991).

The '883 reference does NOT disclose what materials the "manmade fibres" therein are comprised and does NOT disclose whether the "manmade fibres" are fully thermally activated.

The '716 reference is directed to a multi-layer, fibrous, porous web material wherein the fibers of the synthetic layer are applied in the molten state to the underlying layer. Further, the multi-layer fibrous, porous web material of the '716 reference is intended for use a heat sealed infusion package. See the '716 reference at column 2, line 59 to column 3, line 6. As is known in the heat seal infusion web material field, activation of synthetic fibers is typically required to achieve satisfactory heat seal seams of the infusion package. It is likely that the synthetic fibers of the '716 reference are substantially fully activated. Under Symbol Technologies, claim 5 is not obvious over the '883 and '716 references, singly or in combination, and is patentable for at least this additional reason.

Pending claim 7 is not obvious in view of the '883 and '716 references,
 either singly or in combination for additional reasons.

Pending claim 7 depends directly from claim 6. Pending claim 7 recites in one pertinent part: "wherein the synthetic pulp [having a micro-fibrillar structure] consists of a polyolefin material."

The '883 reference does NOT disclose synthetic pulps, synthetic pulps having a micro-fibrillar structure or polyolefin synthetic pulps.

The '716 reference discloses melt blowing (column 2, lines 61-63), which is the extrusion of molten polyolefin materials, to form a web material layer. It is not believed possible to form micro-fibrillar pulps by extruding polyolefin materials in a molten state. Under <u>Symbol Technologies</u>, claim 7 is not obvious over the '883 and '716 references, singly or in combination, and is patentable for at least this additional reason.

Pending claim 12 is not obvious in view of the '883 and '716 references,
 either singly or in combination for additional reasons.

Pending claim 12 recites in one pertinent part: "having a dry crimp strength at least twenty percent greater than a fibrous non-woven non-heat seal porous web material of the same composition without the synthetic material."

The '883 and '716 references do NOT disclose how to improve crimp strength of the multi-layer, fibrous porous web materials disclosed therein. The '883 and '716 references do NOT disclose what fibers need to be used to improve crimp strength of the multi-layer, fibrous porous web materials disclosed therein. Clearly, the '883 and '716 references do NOT provide disclosure as to how a skilled person can improve the dry crimp strength of a single layer fibrous, porous web material by at least twenty percent over a fibrous non-woven non-heat seal porous web material of the same composition without the synthetic material. Under <u>Symbol Technologies</u>, claim 12 is not obvious over the '883 and '716 references, singly or in combination, and is patentable for at least this additional reason.

Pending claim 19 is not obvious in view of the '883 and '716 references,
 either singly or in combination for additional reasons.

Amended claim 19 recites in one pertinent part: "wherein said . . . web material comprises a first phase and a second phase . . ." As discussed in Applicants' specification and remarked on above, Applicants' invention includes a single layer, multi-phase web material having a mixture of fibers throughout the layer with no clear line of demarcation between the two phases.

The '883 and '716 references clearly are directed to web materials having clear interface regions defining distinct layers of fibers therein. The '883 and '716 references do NOT disclose a single layer, multi-phase web material. Under <u>Symbol Technologies</u>, claim 19 is not obvious over the '883 and '716 references, singly or in combination, and is patentable for at least this additional reason.

Atty. Docket No.: DEXNON/096/US

In summary, Applicant has addressed the rejection within the present Office Action. It is believed the application now stands in condition for allowance, and prompt favorable action thereon is respectfully solicited.

Respectfully submitted,

Helen Viazmensky and Peter C. Scott

Rv.

James E. Piotrowski Registration No. 43,860 Alix, Yale & Ristas, LLP Attorney For Applicants

Date: 3/26/2002 750 Main Street- Suite 1400 Hartford, CT 06103-2721 (860) 527-9211

G01wpdcosiJeptDaltarkdexnori 096tdekron 036 us 3-02 response doc